



NATA LIGHTING CO.,LTD.
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Nata

Client: NT

LumCAT: 1-1668-S

Luminaire: BJB47.360.1020.00

Report No: 20250926-B007

Ballast type: DC

Test No: 20250926-C007

Voltage(V): 37.400

LampCAT: CITIZEN CLU703

Current(A): 0.354

Lamp flux(lm): 1492.0

Power (W): 13.230

Number of Lamps: 1

PF: 0.000

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 25

Photometric Results

Lumens(lm): 1305.78, Efficiency(%): 87.52% , Luminous Efficacy(lm/W): 98.70

Central intensity(cd): 9261.329, Maximum intensity(cd): 9261.329

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=15.2

[C90/270]Total=15.2

Field angle(10%Imax): [C0/180]Total=40.2

[C90/270]Total=40.2

Maximum s/h(1/2): C0_180=0.26 C90_270=0.26

Maximum s/h(1/4): C0_180=0.29 C90_270=0.29

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.52%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.204%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/9/26
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.19

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9261.329	0.000	0	0.00%	0.00%
1.0	9164.733	8.817	8.817	0.59%	0.68%
2.0	8853.512	25.861	34.678	1.73%	2.66%
3.0	8297.896	41.021	75.699	2.75%	5.80%
4.0	7643.256	53.360	129.059	3.58%	9.88%
5.0	6814.742	62.198	191.256	4.17%	14.65%
6.0	5950.861	67.087	258.343	4.50%	19.78%
7.0	5085.609	68.503	326.846	4.59%	25.03%
8.0	4368.365	67.660	394.506	4.53%	30.21%
9.0	3725.760	65.598	460.105	4.40%	35.24%
10.0	3173.628	62.437	522.542	4.18%	40.02%
11.0	2685.049	58.540	581.082	3.92%	44.50%
12.0	2292.455	54.411	635.493	3.65%	48.67%
13.0	2011.544	51.078	686.571	3.42%	52.58%
14.0	1765.829	48.350	734.921	3.24%	56.28%
15.0	1599.757	46.204	781.125	3.10%	59.82%
16.0	1423.824	44.304	825.429	2.97%	63.21%
17.0	1270.368	41.956	867.385	2.81%	66.43%
18.0	1144.612	39.818	907.203	2.67%	69.48%
19.0	1027.176	37.785	944.987	2.53%	72.37%
20.0	930.347	35.828	980.815	2.40%	75.11%
21.0	851.666	34.218	1015.034	2.29%	77.73%
22.0	773.607	32.661	1047.694	2.19%	80.24%
23.0	711.215	31.156	1078.85	2.09%	82.62%
24.0	652.782	29.822	1108.672	2.00%	84.91%
25.0	596.144	28.398	1137.069	1.90%	87.08%
26.0	535.420	26.711	1163.78	1.79%	89.13%
27.0	472.521	24.660	1188.44	1.65%	91.01%
28.0	410.077	22.346	1210.785	1.50%	92.73%
29.0	327.975	19.310	1230.095	1.29%	94.20%
30.0	261.529	15.916	1246.011	1.07%	95.42%
31.0	203.001	12.927	1258.938	0.87%	96.41%
32.0	124.182	9.373	1268.312	0.63%	97.13%
33.0	80.656	6.035	1274.346	0.40%	97.59%
34.0	49.132	3.928	1278.274	0.26%	97.89%
35.0	29.612	2.446	1280.72	0.16%	98.08%
36.0	18.929	1.546	1282.265	0.10%	98.20%
37.0	14.907	1.104	1283.369	0.07%	98.28%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	13.471	0.947	1284.316	0.06%	98.36%
39.0	12.183	0.876	1285.192	0.06%	98.42%
40.0	10.990	0.808	1286	0.05%	98.49%
41.0	9.860	0.742	1286.742	0.05%	98.54%
42.0	8.931	0.683	1287.425	0.05%	98.59%
43.0	8.118	0.632	1288.056	0.04%	98.64%
44.0	7.506	0.590	1288.646	0.04%	98.69%
45.0	6.904	0.554	1289.2	0.04%	98.73%
46.0	6.461	0.523	1289.723	0.04%	98.77%
47.0	6.081	0.499	1290.221	0.03%	98.81%
48.0	5.732	0.478	1290.699	0.03%	98.85%
49.0	5.405	0.457	1291.156	0.03%	98.88%
50.0	5.120	0.439	1291.595	0.03%	98.91%
51.0	4.856	0.422	1292.017	0.03%	98.95%
52.0	4.613	0.406	1292.424	0.03%	98.98%
53.0	4.402	0.392	1292.816	0.03%	99.01%
54.0	4.212	0.380	1293.196	0.03%	99.04%
55.0	4.096	0.371	1293.566	0.02%	99.06%
56.0	4.001	0.366	1293.932	0.02%	99.09%
57.0	3.938	0.363	1294.295	0.02%	99.12%
58.0	3.885	0.362	1294.657	0.02%	99.15%
59.0	3.843	0.361	1295.018	0.02%	99.18%
60.0	3.811	0.362	1295.38	0.02%	99.20%
61.0	3.779	0.362	1295.742	0.02%	99.23%
62.0	3.716	0.361	1296.103	0.02%	99.26%
63.0	3.716	0.361	1296.465	0.02%	99.29%
64.0	3.674	0.363	1296.827	0.02%	99.31%
65.0	3.653	0.363	1297.19	0.02%	99.34%
66.0	3.684	0.366	1297.556	0.02%	99.37%
67.0	3.674	0.370	1297.926	0.02%	99.40%
68.0	3.642	0.371	1298.297	0.02%	99.43%
69.0	3.579	0.368	1298.665	0.02%	99.46%
70.0	3.505	0.364	1299.029	0.02%	99.48%
71.0	3.442	0.359	1299.388	0.02%	99.51%
72.0	3.399	0.356	1299.744	0.02%	99.54%
73.0	3.325	0.352	1300.095	0.02%	99.56%
74.0	3.304	0.349	1300.444	0.02%	99.59%
75.0	3.304	0.349	1300.793	0.02%	99.62%

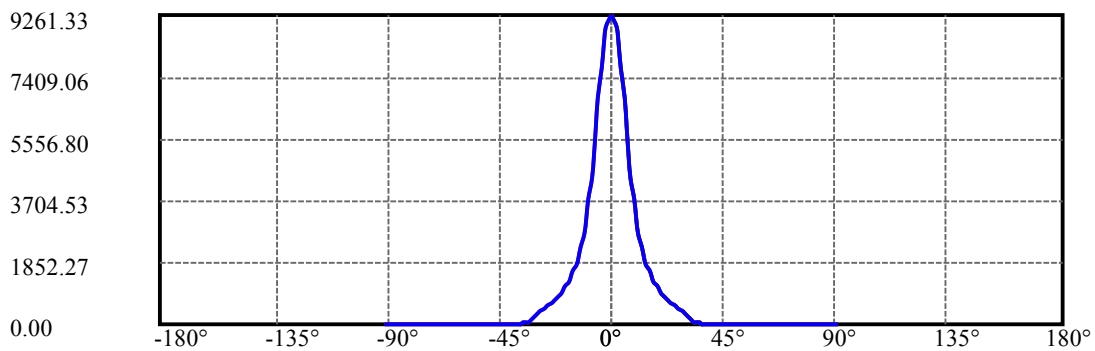
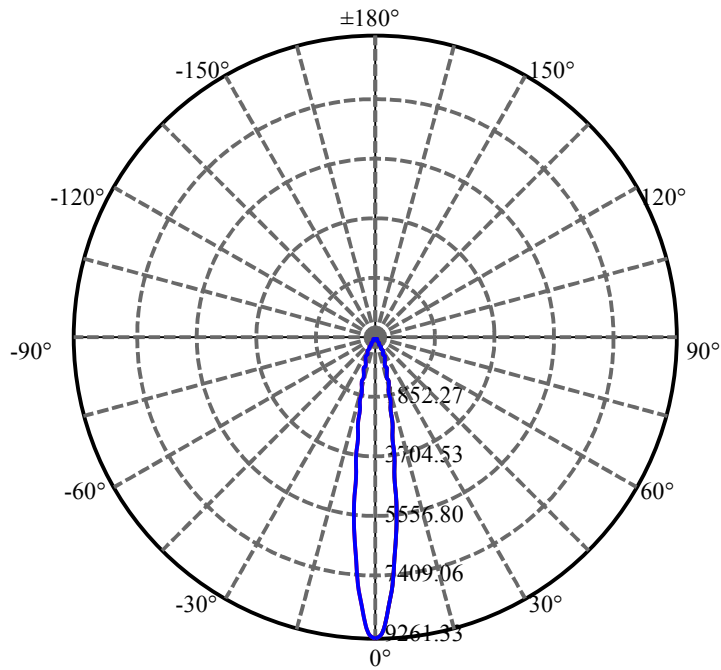
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	3.262	0.349	1301.142	0.02%	99.64%
77.0	3.220	0.346	1301.487	0.02%	99.67%
78.0	3.209	0.344	1301.831	0.02%	99.70%
79.0	3.167	0.343	1302.174	0.02%	99.72%
80.0	3.178	0.342	1302.516	0.02%	99.75%
81.0	3.114	0.340	1302.856	0.02%	99.78%
82.0	3.093	0.337	1303.193	0.02%	99.80%
83.0	3.062	0.335	1303.527	0.02%	99.83%
84.0	3.030	0.332	1303.859	0.02%	99.85%
85.0	2.988	0.328	1304.188	0.02%	99.88%
86.0	2.988	0.327	1304.514	0.02%	99.90%
87.0	2.914	0.323	1304.837	0.02%	99.93%
88.0	2.882	0.317	1305.155	0.02%	99.95%
89.0	2.829	0.313	1305.468	0.02%	99.98%
90.0	2.819	0.310	1305.777	0.02%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1246.01	83.51%	95.42%
0-40	1286.00	86.19%	98.49%
0-60	1295.38	86.82%	99.20%
0-90	1305.47	87.50%	99.98%
0-120	1305.47	87.50%	99.98%
0-180	1305.78	87.52%	100.00%
60-90	10.09	0.68%	0.77%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-21.91	1044.62	70.01%	80.00%

ZONAL LUMEN SUMMARY

0-10	522.54
10-20	458.27
20-30	265.20
30-40	39.99
40-50	5.60
50-60	3.78
60-70	3.65
70-80	3.49
80-90	2.95
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



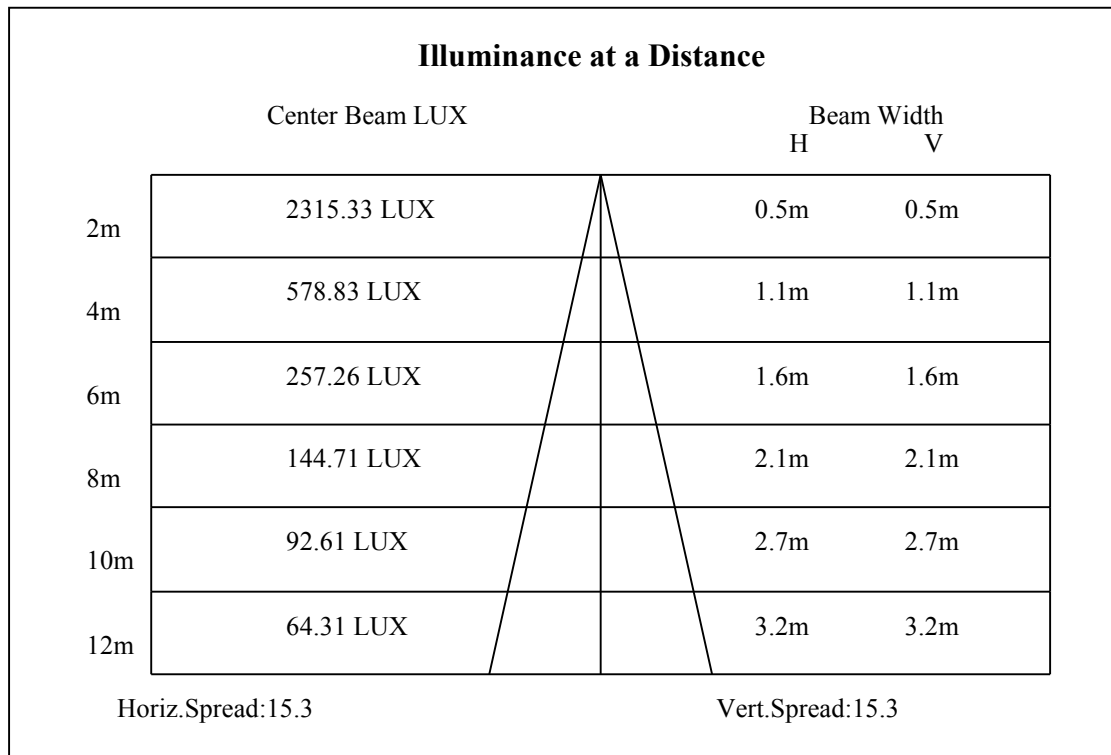
C0(Max): —————

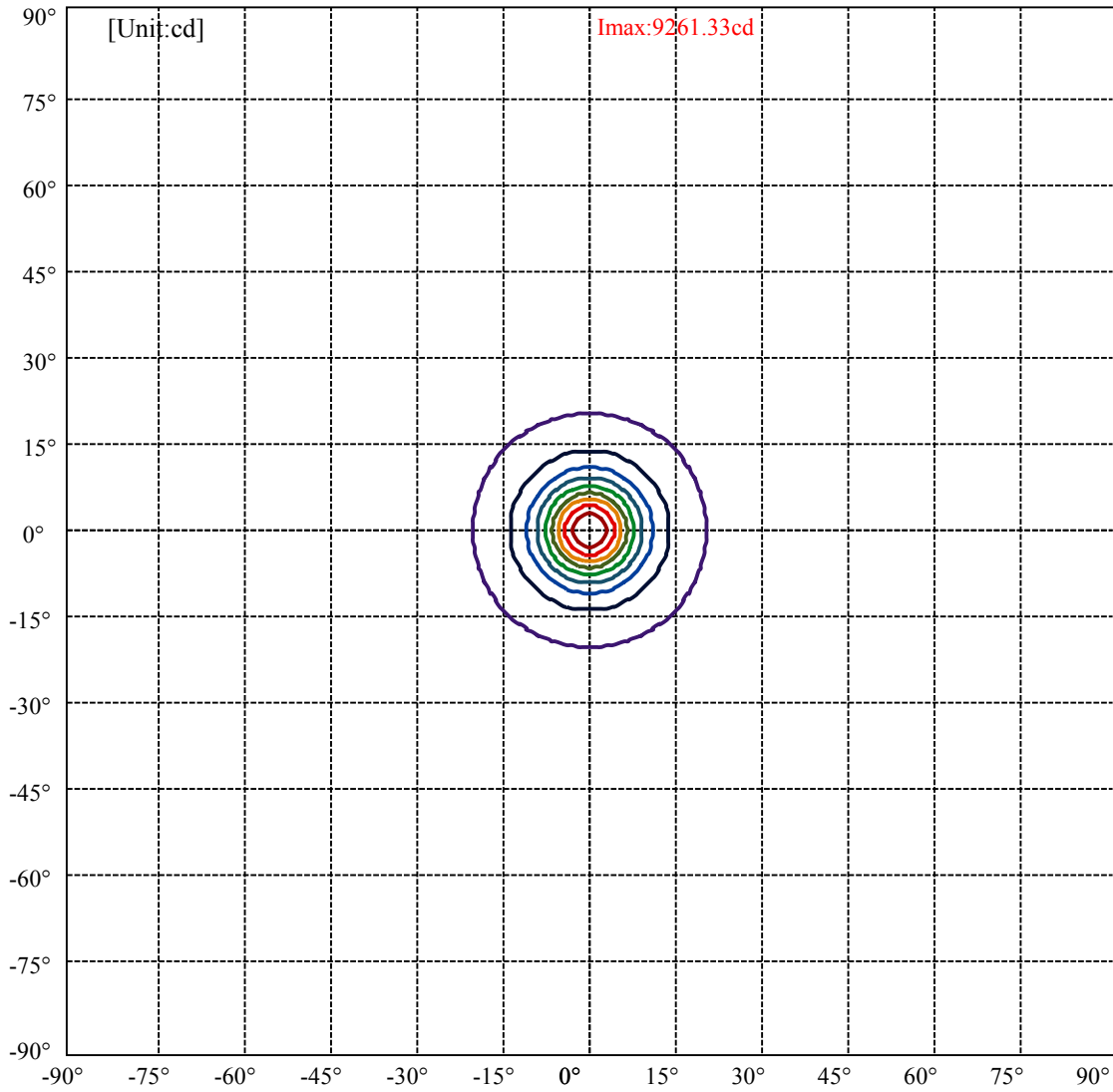
C0/C180: —————

C90/C270: —————

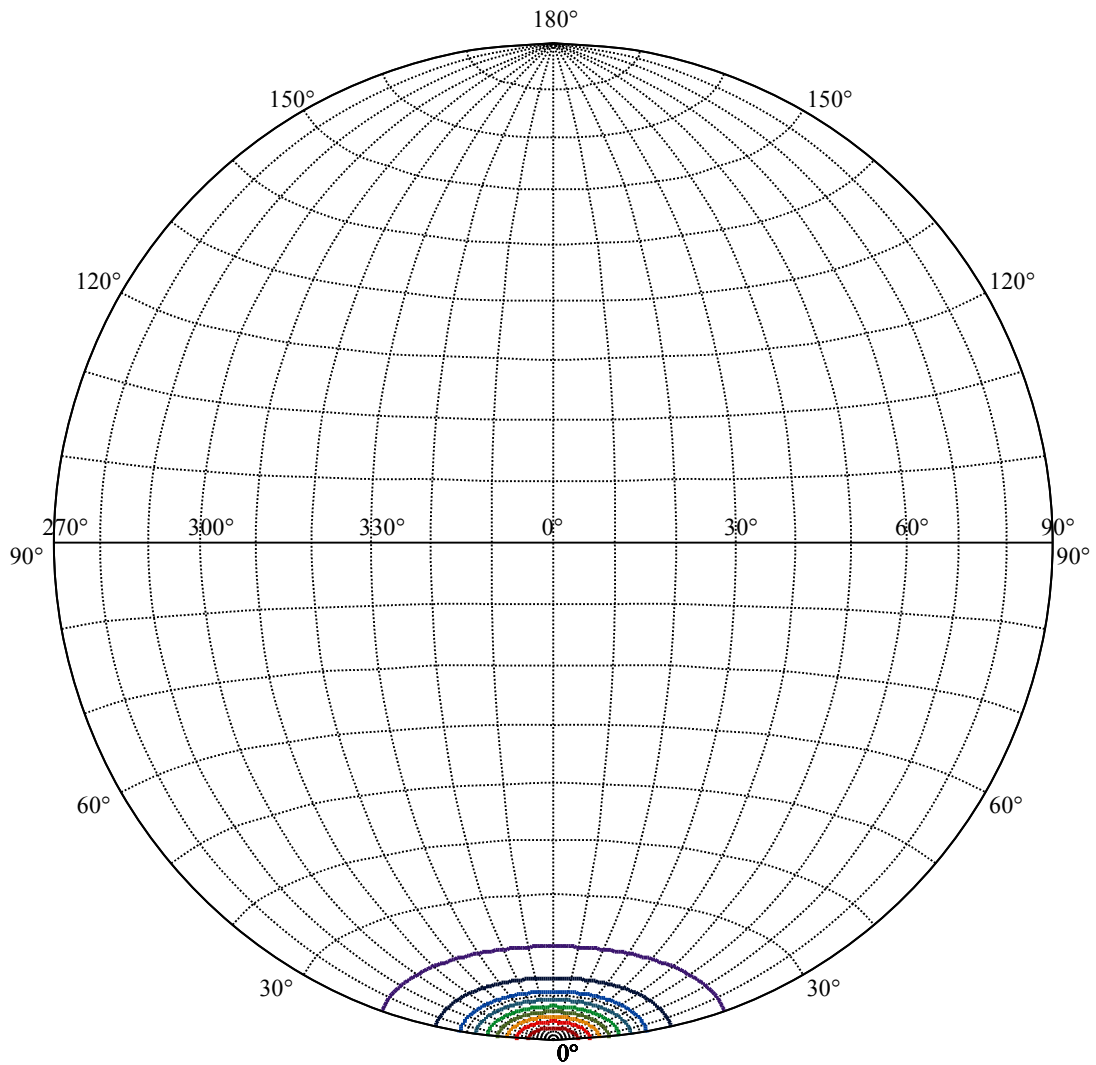
Field angle(10%Imax):C0/180Left:20.1 Right:20.1
:C90/270Left:20.1 Right:20.1

Beam Angle(50%Imax):C0/180Left:7.6 Right:7.6
:C90/270Left:7.6 Right:7.6





(10%Imax) 926.133	—
(20%Imax) 1852.27	—
(30%Imax) 2778.4	—
(40%Imax) 3704.53	—
(50%Imax) 4630.66	—
(60%Imax) 5556.8	—
(70%Imax) 6482.93	—
(80%Imax) 7409.06	—
(90%Imax) 8335.2	—



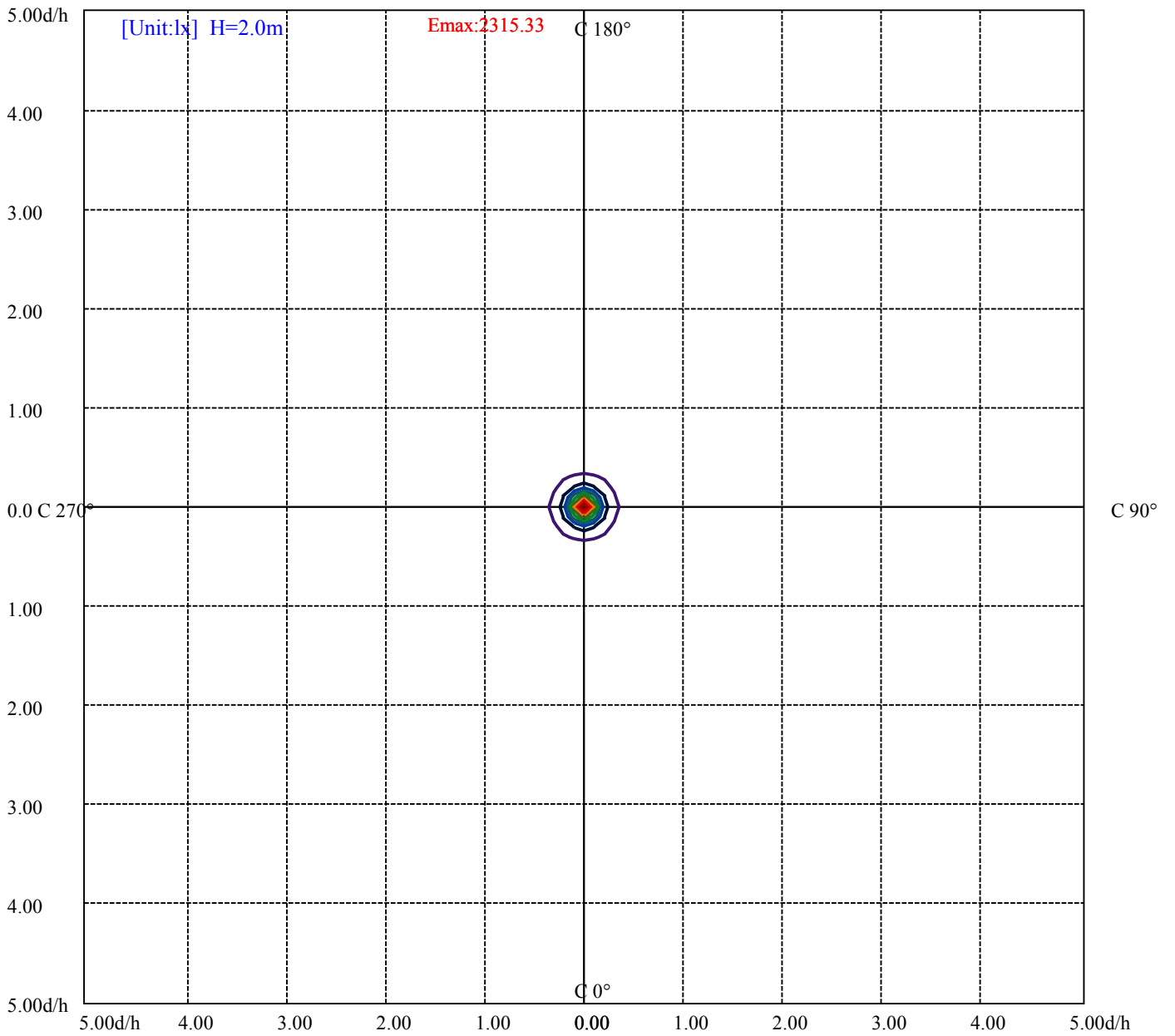
House

[Unit:cd]

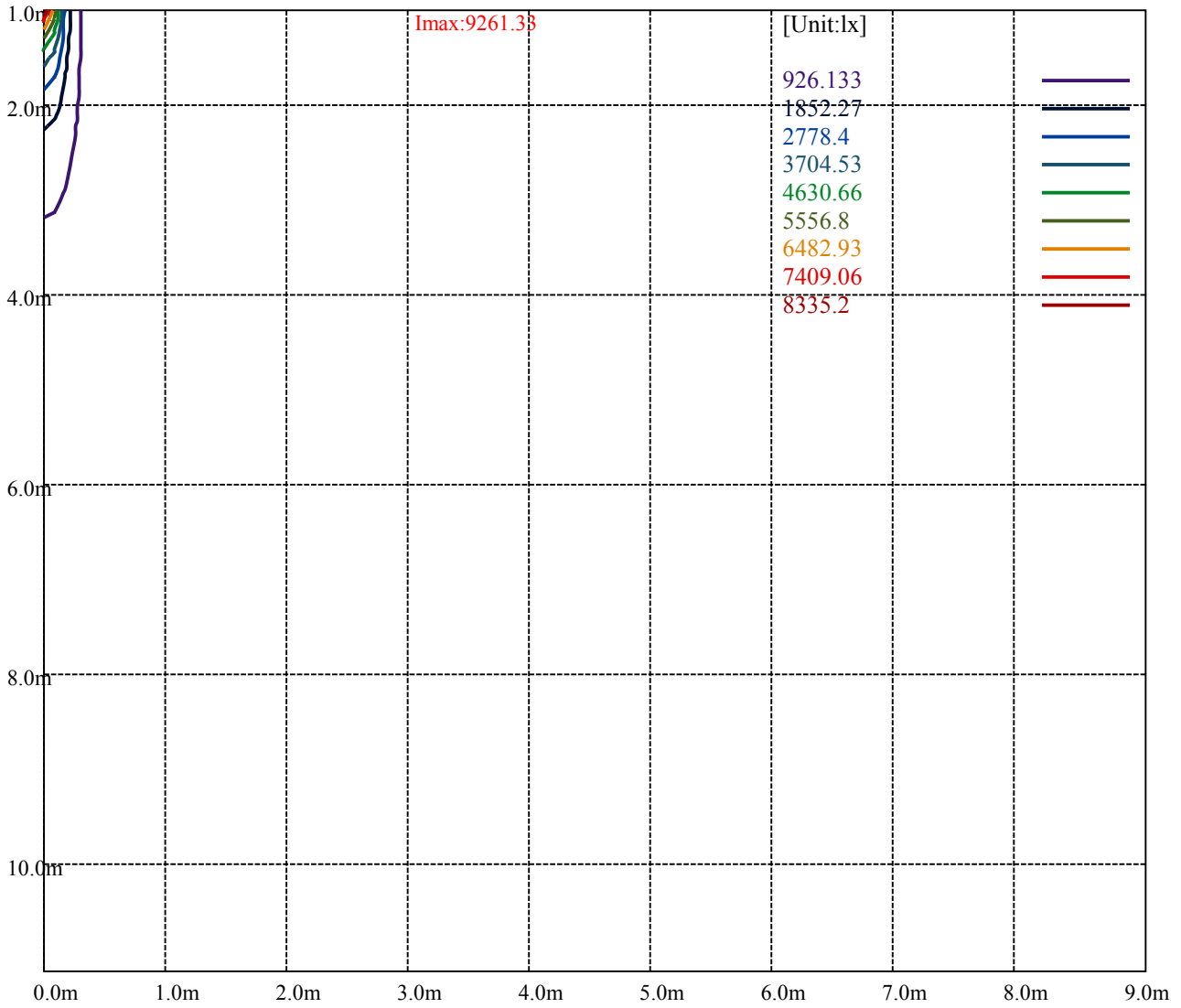
Road

Imax:9261.33

(10%Imax)	926.133	—
(20%Imax)	1852.27	—
(30%Imax)	2778.4	—
(40%Imax)	3704.53	—
(50%Imax)	4630.66	—
(60%Imax)	5556.8	—
(70%Imax)	6482.93	—
(80%Imax)	7409.06	—
(90%Imax)	8335.2	—



- (10%Emax) 231.5327
- (20%Emax) 463.065
- (30%Emax) 694.5975
- (40%Emax) 926.1325
- (50%Emax) 1157.665
- (60%Emax) 1389.198
- (70%Emax) 1620.73
- (80%Emax) 1852.262
- (90%Emax) 2083.795



Luminance Table

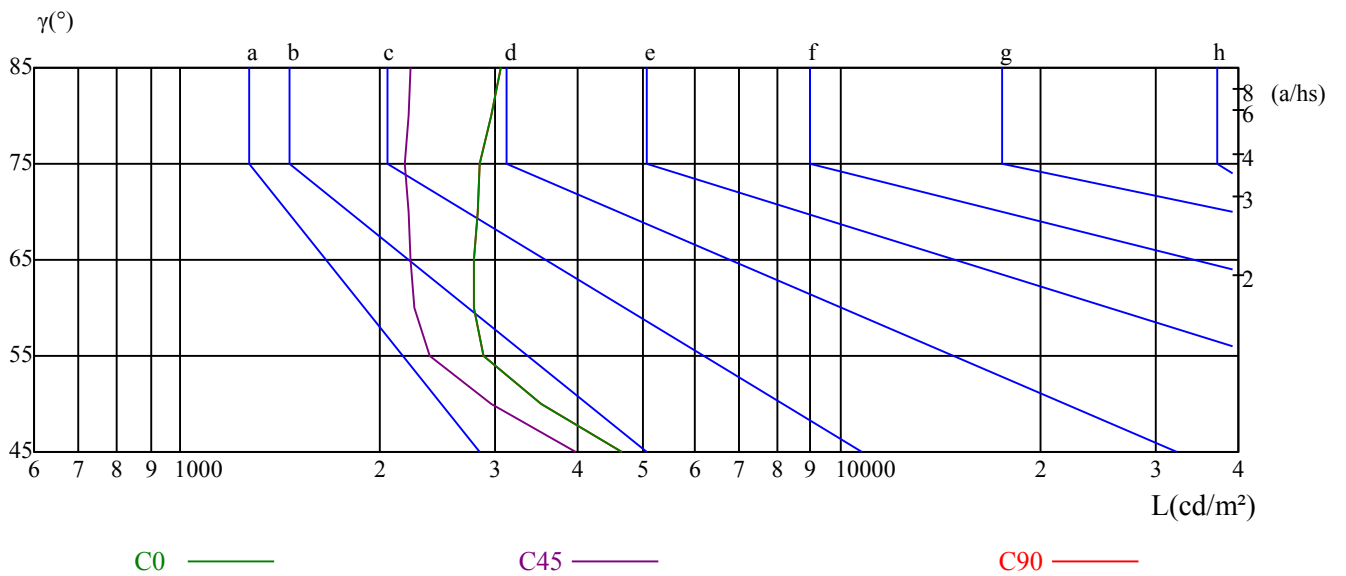
γ	45	50	55	60	65	70	75	80	85
C0	4650	3512	2886	2781	2787	2824	2843	2958	3053
C45	3965	2951	2387	2263	2228	2216	2185	2220	2230
C90	4650	3512	2886	2781	2787	2824	2843	2958	3053

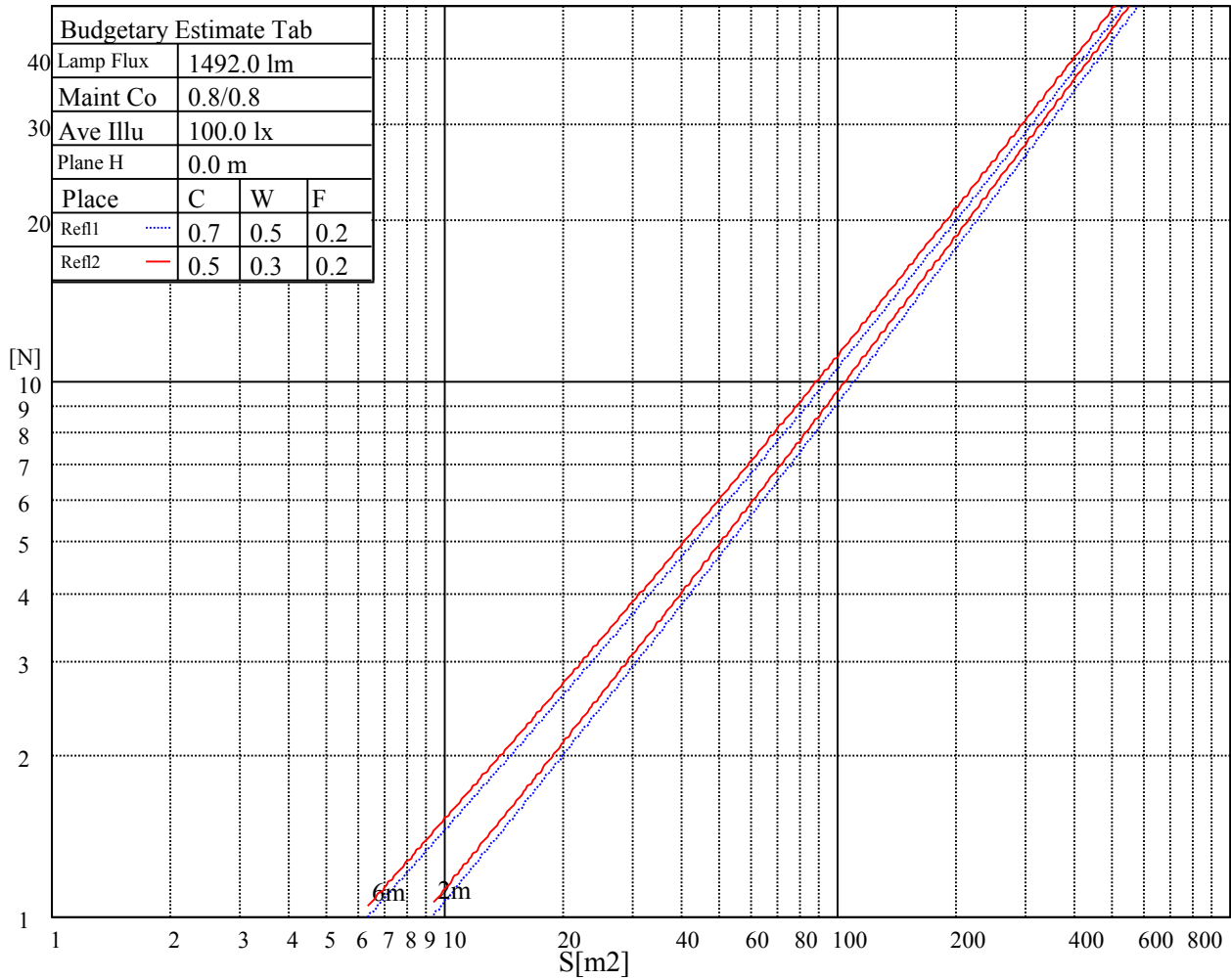
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7056	7056	7056	10422	10422	10422	27983	27983	27983

Glare Table

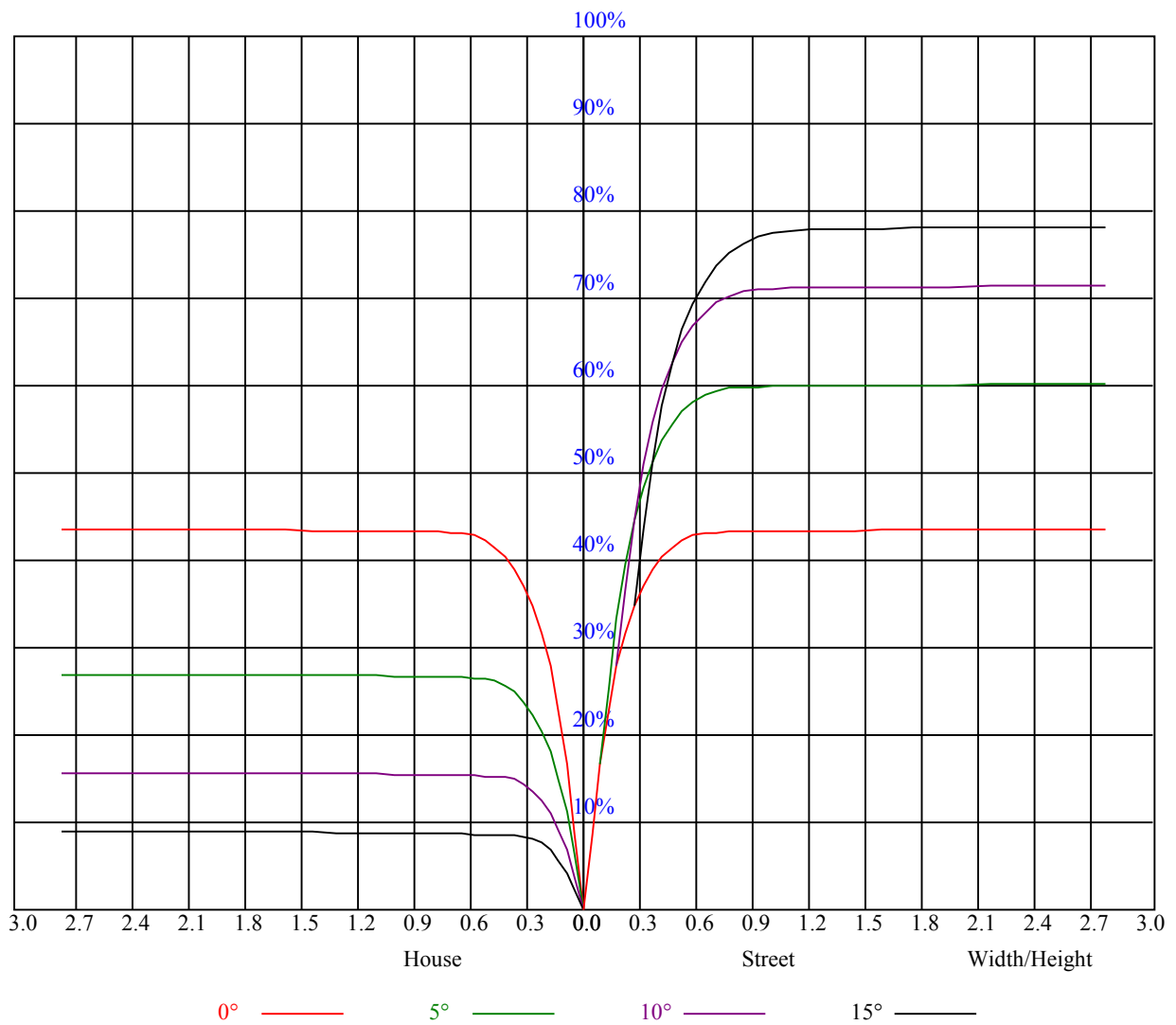
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

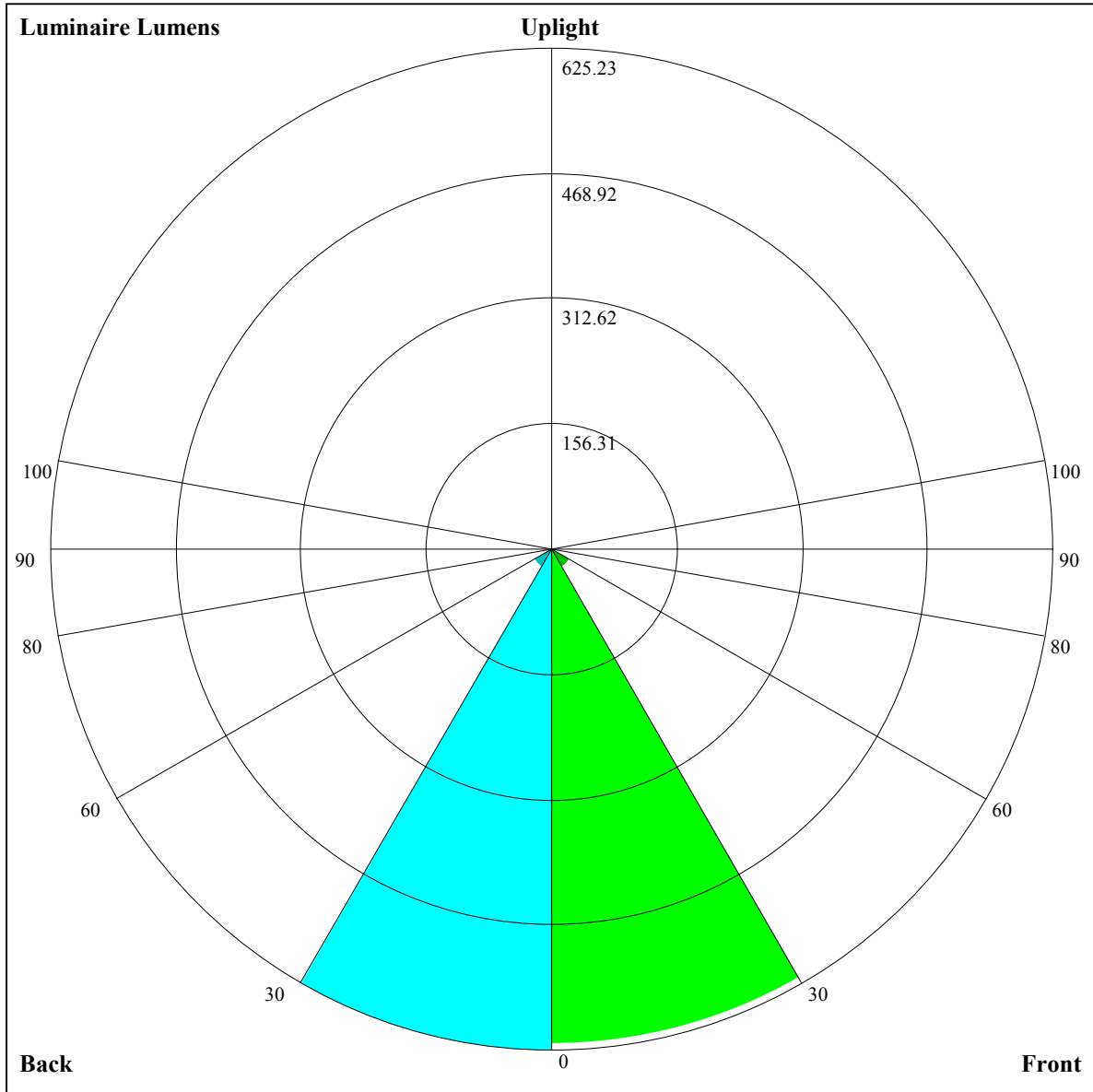
Luminance Limiting Curve





RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.88
1	0.99	0.97	0.95	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.84
2	0.94	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.85	0.85	0.84	0.83	0.81
3	0.90	0.87	0.84	0.89	0.86	0.84	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.79
4	0.87	0.83	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.81	0.79	0.77	0.76
5	0.83	0.80	0.77	0.83	0.79	0.77	0.81	0.78	0.76	0.80	0.78	0.76	0.79	0.77	0.75	0.74
6	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.77	0.75	0.73	0.72
7	0.78	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.75	0.73	0.71	0.70
8	0.76	0.72	0.70	0.75	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.71	0.69	0.68
9	0.74	0.70	0.68	0.73	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.71	0.69	0.67	0.66
10	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.68	0.66	0.70	0.67	0.65	0.65





Luminaire Lumens:

FL=617.82,FM=24.99,FH=3.6,FVH=1.64

BL=625.23,BM=25.06,BH=3.54,BVH=1.61

UL=0,UH=0

BUG Rating:B2-U0-G0

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	9360.35	9206.64	8846.86	8282.69	7560.59	6533.61	5733.81	4993.13	4311.57
45.0	9177.93	9350.22	9340.93	9071.51	8606.16	7944.87	7181.39	6167.91	5390.92
90.0	9340.08	9367.11	9183.00	8809.70	8227.80	7268.38	6458.44	5466.93	4740.61
135.0	9166.95	9358.66	9400.89	9228.60	8819.83	8077.47	7322.43	6314.02	5499.87
180.0	9360.35	9315.59	9089.25	8489.61	7846.06	7076.66	6037.01	5225.38	4325.08
225.0	9177.93	8794.50	8189.79	7255.71	6433.11	5611.35	4631.66	3942.50	3349.61
270.0	9340.08	9176.24	8792.81	8032.70	7268.38	6447.46	5624.86	4633.35	3956.01
315.0	9166.95	8748.89	7984.56	7212.64	6384.12	5558.14	4617.30	3941.65	3373.26
360.0	9360.35	9206.64	8846.86	8282.69	7560.59	6533.61	5733.81	4993.13	4311.57
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3585.25	3104.69	2710.28	2313.34	1682.37	1682.37	1592.50	1429.67	1289.39
45.0	4659.53	4030.33	3336.10	2896.08	2531.23	2221.28	1904.57	1693.43	1466.24
90.0	4087.76	3381.71	2908.75	2522.79	2208.61	1669.36	1669.36	1480.60	1320.72
135.0	4765.94	4103.81	3526.97	2930.71	2551.50	2233.10	1978.05	1713.70	1532.96
180.0	3709.40	3179.86	2745.75	2326.01	2058.28	1832.78	1648.67	1489.89	1320.13
225.0	2863.99	2387.66	1903.72	1639.88	1639.88	1431.95	1294.88	1173.26	1044.13
270.0	3238.98	2771.09	2399.48	2027.88	1785.49	1589.55	1422.33	1244.12	1130.11
315.0	2895.24	2429.89	1949.33	1682.96	1634.99	1466.24	1287.70	1165.92	1059.25
360.0	3585.25	3104.69	2710.28	2313.34	1682.37	1682.37	1592.50	1429.67	1289.39
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1139.23	1033.91	943.37	863.23	778.60	718.89	670.58	624.89	553.53
45.0	1311.69	1180.78	1041.43	948.53	868.29	799.88	730.63	681.65	641.95
90.0	1186.69	1042.44	944.98	865.25	776.49	715.17	667.12	613.15	568.22
135.0	1375.03	1214.56	1105.61	1008.49	907.14	838.73	760.19	702.76	654.62
180.0	1202.74	1076.90	984.84	902.08	807.48	734.85	676.58	611.55	549.05
225.0	953.09	872.43	786.96	722.61	666.02	610.53	554.37	489.85	420.84
270.0	1021.16	924.88	830.29	760.19	696.00	641.11	585.37	532.16	449.39
315.0	967.28	871.50	805.29	742.96	688.82	630.55	577.43	513.16	445.76
360.0	1139.23	1033.91	943.37	863.23	778.60	718.89	670.58	624.89	553.53
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	486.38	412.74	321.86	252.35	174.49	121.95	76.77	35.30	18.41
45.0	600.57	523.71	453.61	434.19	344.41	216.29	159.28	96.11	55.83
90.0	492.04	423.29	352.01	282.34	202.19	150.33	104.05	64.36	29.90
135.0	600.57	516.11	445.17	427.43	427.43	208.78	152.78	104.81	63.43
180.0	479.80	427.43	427.43	241.88	179.38	126.18	70.10	38.43	21.96
225.0	333.69	265.61	204.21	148.30	86.99	49.15	22.13	16.98	15.71
270.0	431.66	431.66	225.92	167.65	117.56	76.26	37.67	22.04	17.90
315.0	355.48	280.06	193.57	138.09	91.55	44.51	22.47	15.03	13.77
360.0	486.38	412.74	321.86	252.35	174.49	121.95	76.77	35.30	18.41
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	15.03	13.85	12.50	11.74	11.06	10.39	9.71	8.61	8.19
45.0	28.55	15.03	13.77	12.67	11.57	10.39	9.54	8.53	7.69
90.0	18.33	16.47	14.53	12.84	11.32	9.80	8.95	8.45	8.11
135.0	27.95	17.57	15.62	14.19	12.75	11.15	9.97	8.87	8.02
180.0	18.33	17.40	16.30	14.61	12.92	11.15	8.95	7.52	6.33
225.0	14.02	12.42	11.06	9.80	8.61	7.94	7.43	7.01	6.50
270.0	16.72	15.12	13.77	12.50	11.49	10.39	9.80	9.37	8.95
315.0	12.50	11.40	10.22	9.12	8.19	7.69	7.09	6.59	6.25
360.0	15.03	13.85	12.50	11.74	11.06	10.39	9.71	8.61	8.19

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	7.52	7.26	7.09	6.67	6.33	5.83	5.32	4.98	4.65
45.0	6.67	6.17	5.83	5.32	5.07	4.81	4.73	4.65	4.48
90.0	8.02	7.85	7.77	7.77	7.60	7.35	6.93	6.25	5.57
135.0	7.09	6.33	5.66	5.07	4.48	4.22	3.97	3.80	3.72
180.0	5.57	4.81	4.56	4.31	4.22	4.14	4.05	3.97	3.88
225.0	6.17	5.66	4.98	4.65	4.31	4.14	4.05	4.05	4.22
270.0	8.45	7.94	7.43	6.93	6.25	5.74	5.32	4.98	4.73
315.0	5.74	5.66	5.32	5.15	4.98	4.73	4.48	4.22	3.97
360.0	7.52	7.26	7.09	6.67	6.33	5.83	5.32	4.98	4.65
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	4.31	4.22	4.14	4.14	4.05	4.05	4.05	4.05	4.14
45.0	4.31	4.14	3.97	3.80	3.63	3.55	3.46	3.46	3.46
90.0	4.90	4.39	4.14	4.05	4.05	3.97	3.80	3.72	3.63
135.0	3.63	3.63	3.63	3.72	3.80	3.88	3.97	3.97	3.80
180.0	3.88	3.97	3.97	3.97	3.88	3.88	3.88	3.80	3.72
225.0	4.22	4.22	4.22	4.14	4.05	3.88	3.80	3.72	3.63
270.0	4.56	4.39	4.31	4.05	3.97	3.88	3.88	3.88	3.80
315.0	3.88	3.80	3.63	3.63	3.63	3.63	3.63	3.63	3.55
360.0	4.31	4.22	4.14	4.14	4.05	4.05	4.05	4.05	4.14
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.14	4.14	4.14	4.14	4.14	4.05	3.97	3.97	3.88
45.0	3.46	3.46	3.38	3.46	3.46	3.46	3.63	3.63	3.55
90.0	3.63	3.63	3.55	3.63	3.55	3.63	3.63	3.46	3.38
135.0	3.72	3.63	3.55	3.46	3.55	3.46	3.46	3.38	3.29
180.0	3.80	3.80	3.80	3.72	3.63	3.63	3.55	3.55	3.55
225.0	3.63	3.55	3.55	3.63	3.72	3.63	3.46	3.29	3.29
270.0	3.80	3.72	3.72	3.88	3.80	3.80	3.55	3.46	3.38
315.0	3.55	3.46	3.55	3.55	3.55	3.46	3.38	3.29	3.21
360.0	4.14	4.14	4.14	4.14	4.14	4.05	3.97	3.97	3.88
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	3.80	3.80	3.72	3.72	3.63	3.63	3.55	3.55	3.55
45.0	3.46	3.29	3.21	3.29	3.21	3.21	3.12	3.12	3.12
90.0	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.21	3.21
135.0	3.29	3.21	3.21	3.21	3.12	3.04	3.04	3.04	3.12
180.0	3.46	3.38	3.38	3.29	3.29	3.21	3.21	3.12	3.12
225.0	3.29	3.21	3.21	3.21	3.21	3.12	3.12	3.04	3.04
270.0	3.38	3.29	3.29	3.29	3.29	3.21	3.29	3.21	3.21
315.0	3.21	3.12	3.12	3.12	3.04	3.04	3.04	3.04	3.04
360.0	3.80	3.80	3.72	3.72	3.63	3.63	3.55	3.55	3.55
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.46	3.46	3.46	3.38	3.38	3.38	3.12	2.96	2.87
45.0	3.12	3.04	3.04	2.96	2.96	2.96	2.87	2.87	2.87
90.0	3.12	3.12	3.04	3.04	2.96	2.96	2.87	2.79	2.79
135.0	3.04	3.04	2.96	2.96	2.87	2.96	2.87	2.96	2.87
180.0	3.04	3.04	3.04	3.04	3.04	3.04	2.96	2.96	2.96
225.0	3.04	2.96	2.96	2.87	2.87	2.87	2.87	2.87	2.79
270.0	3.12	3.12	3.04	3.04	2.96	2.87	2.87	2.87	2.79
315.0	2.96	2.96	2.96	2.96	2.87	2.87	2.87	2.79	2.70
360.0	3.46	3.46	3.46	3.38	3.38	3.38	3.12	2.96	2.87

Intensity data(cd)

C/ γ ($^{\circ}$)	90.0
0.0	2.87
45.0	2.79
90.0	2.79
135.0	2.87
180.0	2.87
225.0	2.79
270.0	2.79
315.0	2.79
360.0	2.87